IN THE SPECIFICATION

Please amend the specification as presented, below, in clean-unmarked format:

In the paragraph starting on line 15 of page 7:

Figure 3a is a top side view similar to that of Figure 2, and **Figure 3b** is a sectional view similar to that of Figure 1, but depicting an embodiment of the present invention along the side view depicted by **Figure 3c**. Items of package 300 of **Figures 3a-c** being labeled with 3xx numbers that correspond to the 2xx numbers of the labeled items of package 200 of Figure 2. Just as with Figure 2, what would have been a lid and thermal attach corresponding to lid 110 and thermal attach 116, respectively, of Figure 1 have been removed from the package depicted in Figure 3a to allow the relative position of other items under the lid to be seen. As depicted in **Figures 3a-3c**, the exterior of package 300 is comprised of substrate 312 and sealant segments 314a through 314d. Also as shown, die 330 is substantially centered relative to substrate 312, and is attached to substrate 312 via underfill 320 and solder balls 322 (also known as C4 bumps, like solder balls 122 of Figure 1) with underfill 320 shown protruding from underneath and just beyond the edges of die 330. Similarly to solder balls 122 of Figure 1, solder balls 322 provide electrical connections between die 330 and substrate 312. Also similarly to Figure 1, substrate 312 is a printed circuit board with conductors 313 forming electrical connections between solder balls 322 and solder balls 324.

In the paragraph starting on line 1 of page 8:

Like sealant 214 of Figure 2, the sealant used in the embodiment of **Figures 3a-c** is disposed to correspond to where lid 310 meets with substrate 312,

so as to bond lid 310 to substrate 312. However, unlike sealant 214 of Figure 2, the sealant used in this embodiment does not form an unbroken line that surrounds die 330. Instead, the sealant is disposed in four sealant segments 314a-d, leaving breaks between the segments through which pressure that would otherwise build up within the interior of package 300 as a result of moisture being turned to steam when the temperature within the package increases may be released.

B2 cancel

In the paragraph starting on line 10 of page 8:

Referring variously to both Figures 1 and 3a-c, by allowing this release of pressure, lid 310 is not caused to be pushed away relative to substrate 312. As a result, the pressure exerted by lid 310 on thermal attach 316 that conducts heat away from die 330 to lid 310 is reduced, and the effectiveness of the thermal attach in conducting away such heat is preserved.

B3

In the paragraph starting on line 12 of page 9:

In one embodiment, the sealant is comprised of a relatively flexible material permitting substrate 312 and lid 310 to move relative to each other with a high degree of freedom. In another embodiment, the sealant is comprised of a more rigid material limiting the relative movement of substrate 312 and lid 310.

B4

In the paragraph starting on line 17 of page 9:

In one embodiment package 300 would be formed by first attaching die 330 to substrate 312, thereby forming physical and electrical connections between die 330 and substrate 312. The sealant would then be disposed on substrate 312 in the four segments 314a-d, where lid 310 is to be attached to substrate 312. Thermal attach 316 would then be disposed on die 330, where lid 310 is to be

B5

B5 cancel

attached to die 330. Then lid 310 would be attached to substrate 312 (via sealant 314a-d) and die 330 (via thermal attach 316). As those skilled in the art will understand, the order in which these occur may be changed without departing from the spirit of the invention.

In the paragraph starting on line 10 of page 10:

B6

In one embodiment, lid 310 has one or more vent-holes, such as vent-hole 311, formed therethrough, that could also serve to permit the release of pressure within the interior of package 300, but which may be blocked as a result of the manner in which package 300 is installed, either for testing or for normal use. In another embodiment, the lid has no vent-holes formed therethrough, and the breaks between sealant segments 314a-314d are the sole means provided for release of pressure.

In the paragraph starting on line 17 of page 10:

B7

In one embodiment, thermal attach 316 is a thermal grease, while in another embodiment, thermal attach 316 is a thermal adhesive.

In the paragraph starting on line 19 of page 10:

B8

In one embodiment, lid 310 is made of material capable of conducting heat away from die 330, such as copper or aluminum. In one embodiment, lid 310 releases the heat conducted away from die 330 to ambient air surrounding package 300. In another embodiment, lid 310 conducts the heat to other thermally conductive apparatus with which lid 310 is in contact, such as a heatsink (or heat spreader), heat pipe, or thermal electric cooler.

In the paragraph starting on line 10 of page 11:

Figure 4a is a top side view similar to that of Figure 3a, and also depicts an embodiment of the present invention. Figures 4a-c are provided to show an alternate pattern by which the sealant may be disposed to correspond to where lid 410 would meet with substrate 412, so as to bond lid 410 to substrate 412. Although the patterns in both Figures 3a and 4a are both substantially rectangular, the breaks in the sealant in package 400 are at the corners of the substantially rectangular pattern, instead of being at the sides as in the case of package 300. Items of package 400 of Figures 4a-c being labeled with 4xx numbers that correspond to the 3xx numbers of the labeled items of package 300 of Figures 3a-3c. Just as with Figure 3a, what would have been a lid and thermal attach corresponding to lid 110 and thermal attach 116 (namely, lid 410 and thermal attach 416), respectively, of Figure 1 have been removed from the package depicted in Figure 4a to allow the relative position of other items under the lid to be seen. Also just as with Figures 3a-c, die 430 is substantially centered relative to substrate 412, and is attached to substrate 412 via underfill 420 and solder balls 422 (also known as C4 bumps, like solder balls 122 of Figure 1) with underfill 420 shown protruding from underneath and just beyond the edges of die 430. Also, solder balls 422 provide electrical connections between die 430 and substrate 412, which is a printed circuit board with conductors 413 forming electrical connections between solder balls 422 and pins 424 (pins 424 being appropriate for a pin grid array package, whereas balls 324 were appropriate to a ball grid array package).

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IN THE CLAIMS

Please cancel claims 4, 14 and 24.